

REMARKS

This Response is submitted in reply to the Final Office Action dated September 3, 2008, in which the Examiner:

rejected claims 1-4, 6-8 and 14-24 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,494,004 to Hunter, Jr. in view of U.S. Patent No. 1,599,283 to Phillips and U.S. Patent No. 1,380,358 to Cooke; and rejected claim 9 under 35 U.S.C. § 103(a) as unpatentable over Hunter in view of Phillips and Cooke and further in view of U.S. Patent No. 4,218,016 to Freund.

Applicants respectfully traverse the rejections below. Claims 1-4, 6-10 and 14-24 are currently pending. Claim 10 was previously withdrawn, leaving claims 1-4, 6-9 and 14-24 under consideration. Claims 1 and 14 are independent claims.

Regarding the rejection of claims 1-4, 6-8 and 14-24 under 35 U.S.C. § 103(a) as unpatentable over Hunter in view of Phillips and Cooke, a rejection under 35 U.S.C. § 103(a) is improper unless the Examiner establishes a *prima facie* case of obviousness. A *prima facie* case of obviousness is not established where the reference teachings, alone or in combination, do not teach or suggest each and every claim recitation. When citing multiple references, there must be some motivation to combine the references such that there is a reasonable expectation of successfully achieving the claimed invention with the combination. If the proposed modification to the references would render the prior art being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.

Applicants' independent claims 1 and 14 recite, in part, a resilient member resiliently restraining the combustion conduit against recoil forces.

Neither Hunter nor Phillips nor Cooke, nor any combination thereof, teaches or suggests each and every recitation of claims 1 and 14. As the Examiner states on page 5 of the Final Office Action, Hunter does not teach or suggest a resilient member resiliently restraining the combustion conduit against recoil forces. To remedy Hunter's deficiency, the Examiner cites

Phillips and Cooke as teaching such a resilient restraint to be combined with Hunter's cleaning apparatus.

However, there is no motivation to combine the teachings of Phillips and Cooke with Hunter, such that there is a reasonable expectation of successfully achieving the claimed invention. This lack of motivation is due to the fact that any recoil force resulting from Hunter's pulsed wave would act in a direction opposite to a recoil force caused by the combustor of the present invention. Therefore, combining Hunter's Combustor with the restraint of Phillips and Cooke to achieve the claimed invention recited in claims 1 and 14 would not restrain Hunter's combustor against any recoil forces. Specifically, as seen in Figure 1 below, the direction of Hunter's pulsed wave would result only in potential recoil movement of Hunter's apparatus further into the boiler (to the right in Figure 1). The restraint taught by Phillips and Cooke, when combined with Hunter's apparatus in an attempt to achieve the claimed invention, would only provide restraint for movement of the apparatus in a direction away from the boiler (to the left in Figure 1 below). Since the restraint taught by Phillips and Cooke would only provide restraint for Hunter's apparatus in a direction opposite to any potential recoil movement of the apparatus, there is no reasonable expectation of successfully restraining Hunter's apparatus with the restraint taught by Phillips and Cooke. Thus, there is no motivation to combine the teachings of Phillips and Cooke with those of Hunter.



Additionally, with regard to claim 6, neither Hunter nor Phillips nor Cooke, nor any combination thereof, teaches or suggests that the plurality of supports accommodate longitudinal expansion and/or contraction of the combustion conduit. In the Final Office Action, the Examiner asserts that Hunter's support is inherently capable of accommodating some degree of

expansion or contraction due to its structure. (Final Office Action, page 8). However, a finding of inherency is improper unless the Examiner provides rationale or evidence tending to show inherency. (MPEP 2112 IV). Specifically, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. (MPEP 2112 IV). Applicants respectfully submit that the Examiner has provided no such evidence of inherency with regard to claim 6. In fact, Hunter's support is provided with pinion gears 155 for interfacing with the base member's rack gears 157, such that a motor 153M drives the pinion gears 155 to position the cleaning apparatus. (Hunter, col. 3, lines 55-63). Thus, Hunter's gears appear to teach that the support is only moveable by actuation of motor 153M during positioning, which would make Hunter's support incapable of accommodating longitudinal expansion and/or contraction of the combustion conduit. Accordingly, Applicants respectfully submit that it is not inherent that Hunter's support is capable of accommodating some degree of expansion or contraction of the combustion conduit.

With regard to claims 7 and 22, neither Hunter nor Phillips nor Cooke, nor any combination thereof, teaches or suggests a plurality of trolleys each having wheels engaging a track on a support surface. Instead, Hunter teaches a support having pinion gears 155 for engaging rack gears 157. (Hunter, col. 3, lines 55-59). Thus, Hunter does not teach or suggest anything with regard to a trolley having wheels. Furthermore, even if Hunter's support is incorrectly considered a trolley having wheels, at best, Hunter's support teaches a single trolley. The Examiner asserts that Hunter teaches the plurality of trolleys "by simply duplicating the detonative cleaning assembly, shown in Fig.1 of Hunter ... by adding another trolley (51) under the second conduit segment (21)." (Final Office Action, page 4). However, modifying Hunter as indicated by the Examiner to include an additional trolley under segment 21 would render Hunter unsatisfactory for its intended purpose, since the additional trolley would prevent segment 21 from being able to be inserted through opening 81 to clean the interior surface of the boiler. (See Hunter, Fig. 3). Accordingly, Applicants respectfully submit that even if

Hunter's support is incorrectly considered a trolley having wheels, Hunter still fails to teach or suggest a plurality of trolleys.

Additionally, with regard to claim 8, neither Hunter nor Phillips nor Cooke, nor the combination thereof, teaches or suggests that the combustion conduit comprises a plurality of separable segments assembled end-to-end.

Thus, neither Hunter nor Phillips nor Cooke, nor any combination thereof, teaches or suggests each and every recitation of Applicants' dependent claims 2-4, 6-8 and 15-24.

Accordingly, Applicants respectfully submit that the rejection of claims 1-4, 6-8 and 14-24 under 35 U.S.C. § 103(a) as unpatentable over Hunter in view of Phillips and Cooke is improper and should be withdrawn.

Claim 9 was rejected under 35 U.S.C. §103(a) as unpatentable over Hunter in view of Phillips and Cooke and further in view of Freund. Claim 9 depends directly from claim 1 and includes additional recitations thereto.

As stated above, the Examiner has failed to establish a *prima facie* case of obviousness with regard to claim 1. Freund does not overcome the deficiencies of Hunter, Phillips and Cooke in that Freund also does not teach or suggest a resilient member resiliently restraining a combustion conduit against recoil forces. In fact, Freund is directed to a totally different form of soot blower construction than Hunter and adds nothing to the discussion of a resilient member resiliently restraining a combustion conduit against recoil forces.

Accordingly, Applicants respectfully submit that the rejection of claim 9 under 35 U.S.C. § 103(a) as unpatentable over Hunter in view of Phillips and Cooke and further in view of Freund is improper and should be withdrawn.

As Applicants have traversed each and every claim rejection raised by the Examiner, it is hereby respectfully requested that the rejection of claims 1-4, 6-9 and 14-24 be withdrawn, and claims 1-4, 6-9 and 14-24 be passed to issue.

Applicants hereby petition for a three-month extension of time to respond to the present Office Action. Applicants' Attorneys hereby authorize

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the Commissioner to charge the three-month extension fee of \$1110.00 to the Deposit Account 13-0235. Applicants believe that no other fees are due in connection with this Amendment and Response. If any fees are deemed necessary, please charge them to Deposit Account 13-0235.

Respectfully submitted,

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